

FREESCALE SEMICONDUCTOR, INC., §  
n/k/a NXP USA, Inc. §  
§  
Plaintiff, §  
§  
v. § CAUSE NO. A-1:16-CA-00497-LY  
§  
FLUID-FLOW PRODUCTS, INC., D/B/A §  
CONDIT – A FLUID FLOW PRODUCTS §  
COMPANY, SPX CORPORATION AND §  
SPX FLOW, INC. §  
§  
Defendants.

**PLAINTIFF'S FIRST AMENDED COMPLAINT**

Plaintiff Freescale Semiconductor, Inc. (“Freescale”) files this First Amended Complaint against Fluid-Flow Products, Inc., d/b/a Condit – A Fluid Flow Products Company (“Condit”) and SPX, Inc. and SPX Flow, Inc. (collectively “SPX”).

**I.**  
**PARTIES, JURISDICTION, AND VENUE**

1. Freescale is a Delaware corporation with its principal place of business in Austin, Texas. It is a global leader in embedded processing solutions for the automotive, consumer, industrial, and networking markets. Freescale’s Ed Bluestein site in Austin is home to both manufacturing and research and development facilities.

2. Defendant Condit is a North Carolina corporation with its principal place of business in Charlotte, North Carolina. It is a distributor of various industrial products focused on the Southern and Eastern regions of the country. Condit was previously served and has appeared of record in this proceeding.

3. SPX Corporation is a Delaware corporation with its principal place of business in Charlotte, North Carolina. It is a supplier of engineered HVAC products, detection and measurement technologies and power equipment. With operations in about 20 countries, SPX

Corporation has approximately \$2 billion in annual revenue and approximately 6,000 employees worldwide. Its registered agent for service of process is The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801.

4. SPX Flow, Inc. is a Delaware corporation with its principal place of business in Charlotte, North Carolina. It was spun off from SPX Corporation on or about September 26, 2015. SPX Flow is a global multi-industry manufacturer with approximately \$2.5 billion in annual revenue, operations in more than 35 countries and over 8,000 employees. Its registered agent for service of process is Corporation Service Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808.

5. This Court lacks original jurisdiction over this civil action because no federal subject matter jurisdiction exists and Freescale and SPX are citizens of the same State. Accordingly, the matter should be remanded back to the State District Courts of Travis County, Texas.

6. Venue is appropriate in Travis County, which is within the Western District of Texas, because all or a substantial part of the events or omissions giving rise to the claims occurred in Travis County. Upon information and belief, defendants have ongoing and systematic contacts and have purposefully availed themselves of the privilege of conducting activities within Travis County. Defendants, directly or through intermediaries (including websites, distributors, resellers, and others), ship, distribute, offer for sale, sell, and/or advertise products and offer services in the United States, the State of Texas, and Travis County, including the products and services giving rise to the allegations in this complaint. Defendants also committed tortious acts within Travis County.

**IV.**  
**STATEMENT OF FACTS**

7. Freescale owns and operates two semiconductor manufacturing sites, or “fabs,” in Austin, Texas. Semiconductor manufacturing is a high-tech, precise process requiring a controlled, “clean room” environment. Multiple tools and processes within the manufacturing system require compressed air, provided by the facility’s clean dry air (“CDA”) system. Air dryers and their related filtration systems are a key component of the CDA system; they remove moisture and microscopic particulate matter from the air before sending it through the CDA piping distribution system to the manufacturing floor and the hundreds of precision manufacturing tools used to produce semiconductor products on silicon wafers.

8. Condit claims to market the latest in equipment and technologies from some of the world’s premier manufacturers including compressors, dryers, filtration, heating and cooling, separation, and system accessories. It holds itself out as an expert on these systems, advertising on its website:

For over 65 years, the most demanding industries have depended on us for ***unmatched technical expertise*** and commitment to delivering ***state of the art engineered product solutions***, while maintaining exceptional after sales service and support with personalized attention. . . . And now, as part of the Fluid Flow Products group of distribution companies, our scope spreads even wider, enabling us to better assist local, regional, or national customers. . . . The success that customers experience with Condit Company is based on listening to their needs and ***bringing the right team members to each project*** to position product and service solutions that are ***technically sound***, energy efficient and cost-effective for the ***short and long term***.

(emphasis added). One of the manufacturers for whom Condit distributes products is SPX.

9. SPX is a global supplier of specialized, engineered solutions with operations in over 35 countries and sales in over 150 countries around the world. SPX touts its “core strengths” to “include product breadth, global capabilities and the ability to create custom-engineered solutions for diverse flow processes.” It markets itself as focusing on “innovation

and new product development” as well as “continuous improvement” of products. It assures customers that its products “are the first choice in critical large-flow applications that demand quality, energy efficiency and superior service support.” SPX promises that its “systems protect the pneumatically powered investments of global leaders of industry.”

10. One of the products SPX offers is a “Smart” Advanced Dryer Controller or “ADC.” Marketing materials encourage purchases, asking consumers “is your compressed air dryer ‘smart?’” This Smart Controller is promised to have “the newest advancement in technology” for “the most critical applications.” Customers are asked to buy the Smart ADC, which will be an “investment” that “will grow for years.” Indeed, this Smart Controller “manages” regeneration cycles “with precision.” And it is specifically marketed for retrofits like the one undertaken by Freescale:

#### **RETROFITS AND UPGRADES**

So, what does this mean to you if you do not have a PPC dryer? Well, the ADC control system can run nearly any dryer design and has been applied effectively to improve reliability and provide valuable dryer performance data via the onboard advanced communications.

11. With the combined promises of SPX and Condit to provide, install and commission a new state-of-the-art, “smart” dryer system, Freescale entered into a Services Agreement and statement of work (collectively “Agreement”) to retrofit and upgrade its dryer system. The retrofit involved providing and effectively integrating new equipment into three existing dryers, including without limitation a new heater, blower, desiccant and controller.

12. SPX provided the retrofit design plans and Condit agreed to oversee the retrofit project as well as perform certain portions of the installation. Condit further agreed to ensure the proper operation of the new dryers upon startup. For example, Condit agreed to “install the new pre and after filter elements” in the retrofitted dryers and to “start up the dryers confirming proper operation.” Freescale provided some of the labor for the physical retrofit operations, but

that labor was at all times subject to the direction, control and expertise of Condit with respect to retrofitted operations. Condit was responsible for the entire project and was to provide a service technician “on site to offer guidance as a factory representative to see that the installation is satisfactory per the factory’s drawings and guidelines,” which were entirely prepared by SPX. Simply stated, SPX and Condit held themselves out as the experts on these dryer systems and Freescale selected them to ensure the job was done right.

13. In the Agreement, Condit expressly warranted that “all Services w[ould] be performed in a careful, efficient, and workmanlike manner, and w[ould] conform to the requirements and specifications and to the highest standards applicable in the field of [Condit’s] work.” Condit further warranted that the retrofitted dryers would “be free from defects in material and workmanship” and would “comply with all requirements of pertinent specifications, drawings, and samples.”

14. Condit began the retrofit with Dryer 3, the third of Freescale’s three air dryers. The retrofit of Dryer 3 was completed and Condit performed the startup of the dryer in late August 2015.

15. Each of the retrofitted drying systems included two large chambers filled with a moisture-adsorbing desiccant. Process air would flow through one of the chambers, the “on-line chamber,” so the desiccant could remove the moisture from the air before it was used as compressed air by the factory. When the on-line chamber became sufficiently saturated, the second chamber would go on-line and the first would “regenerate.” Regeneration is the process by which the desiccant is heated to very high temperatures to dry out the desiccant. Once the desiccant is sufficiently dry, the chamber is cooled down by a stream of process air (this cooling down period is also known as the “sweep”). Once the regenerated chamber is cooled down, it

goes into “standby” mode, waiting to go on-line until the desiccant in the on-line chamber is once again sufficiently saturated before it goes back on line. This switching of chambers alternates back and forth, thereby maintaining a continuous source of dry process air for use by the factory (which operates 24 hours per day, 7 days per week).

16. On September 16, 2015, while the off-line chamber was regenerating, the desiccant in the on-line chamber was starting to become saturated. Accordingly, the Smart Controller issued a high humidity warning, signaling a need to switch to the off-line chamber. As a result of the warning, the Smart Controller implemented a 10-second cooldown and then immediately started to pressurize the off-line chamber to go online. Within minutes, extremely hot air that had not been properly cooled was blasted throughout Freescale’s factory. Part of the dryer system as retrofitted by Condit caught fire and the factory was evacuated as fire and soot damaged high purity CDA pipes, filters, semiconductor processing equipment and work in progress.

17. Condit’s Agreement promised to retrofit Freescale’s existing SPX heat pump dryers to convert them to SPX blower electric heat regenerated dryers. The Agreement further specified that the dryer cycles would be to heat the desiccant (as required to regenerate) for four (4) hours and then cool the desiccant with process air for twelve (12) hours. Instead, it delivered a Smart Controller that was incapable of being programmed for the required cooldown period. Instead of receiving the twelve hour cooldown period for which it contracted, on the night of the fire, the SPX dryer “cooled down” for only ten seconds, leaving the desiccant at an excessively high temperature.

18. Following the incident, SPX performed an investigation to identify the root cause of the fire. SPX concluded that the fire occurred because an incorrect filter element was installed

in the after-filter housing of Dryer 3. Because this filter was not rated to withstand high-temperature air passing through it, it ignited when the excessively hot air from the newly regenerated desiccant chamber was passed through it.

19. Condit was responsible for installing the filter elements on Dryer 3, but it failed to do so. Moreover, it failed to supervise the installation process to make sure that the proper filter elements were used at the time of installation. It also failed to confirm proper installation upon startup in accordance with the SPX instruction manual. The proper filter element would have been heat rated to withstand the high temperatures experienced on the day of the incident.

20. SPX's root cause report was carefully drafted in an attempt to avoid revealing the cause of the excessively high temperatures it described as a "heat bump." In particular, the Smart Controller was hard coded with a "minimum" cooldown period of only 10 seconds. And while many dryer manufacturers require mandatory cooldown periods before regenerated beds can be put into service, SPX did not even allow users of its Smart Controller to increase the minimum cooldown period. Instead, it was always 10 seconds. Furthermore, SPX had made the design decision to immediately switch to a hot chamber if the on-line chamber was experiencing high humidity rather than waiting until the chamber was ready to go to "standby" mode (i.e. after a normal cooldown period). In other words, on September 16, 2015, SPX's Smart Controller operated exactly as SPX designed it, intentionally sending excessively hot air into Freescale's system, creating a fire and millions of dollars in property damage and other damages.

21. The dangers of a hot switchover are well known to SPX. Indeed, its own instruction manual warns users not to perform a hot switchover if they are operating the dryer in manual mode, *i.e.*, not letting the Smart Controller make the decisions. The instructions state:

**CAUTION:** The control may be placed in the Manual Mode at any time during operation, but *it is cautioned not to manually step out of HEATING chamber and switchover due to hot switchover conditions.*

Despite this caution to customers not to force a hot switchover due to the dangers of doing so, SPX programmed its Smart Controller to automatically do just that anytime it sensed high humidity in the on-line chamber. Despite SPX's marketing hype, its new controller was not so smart after all.

22. Fortunately, no one was injured during the fire, but it did cause Freescale substantial property and product damage. The fire damaged the newly retrofitted Dryer 3 and other components of the CDA system. It also introduced large amounts of soot into the CDA system and ultimately interrupted the supply of CDA to the entire factory, which halted production and caused property damage, including loss of in-process semiconductor wafers.

23. Freescale has placed Condit and SPX on notice that their faulty work and products caused the fire at the Ed Bluestein facility. Freescale presented its claim for payment, asking them to reimburse it for the damages caused by the fire. To date, SPX and Condit have refused to pay any of Freescale's damages.

V.

**CAUSE OF ACTION ONE: CONDIT'S NEGLIGENCE**

24. Freescale re-alleges and incorporates the allegations set forth above in paragraphs 1 to 22 as if set forth fully in this paragraph.

25. Condit owed Freescale a legal duty to provide its services to Freescale in accordance with the professional standards of care and quality generally accepted in Condit's industry. Condit further had the obligation to perform all of its tasks in accordance with the standard of care required of an ordinarily prudent person. Condit breached both of these legal duties to Freescale in at least the following ways:

- a. failing to ensure proper installation of the pre- and after-filter elements;
- b. failing to perform and oversee the retrofit project with appropriate quality control measures;
- c. failing to adequately train and supervise workers during the retrofit project;
- d. failing to properly start up and/or commission Dryer 3, including making sure the correct filter elements were installed;
- e. failing to make sure the dryer was programmed and/or capable of being programmed with an adequate cooldown period ;
- f. failing to conduct adequate due diligence on the capabilities and limitations of the components it selected for the retrofit.

26. Condit's negligence proximately caused damage to Freescale.

## VI.

### **CAUSE OF ACTION TWO: CONDIT'S BREACH OF CONTRACT AND FAILURE TO INDEMNIFY**

27. Freescale re-alleges and incorporates the allegations set forth above in paragraphs 1 to 25 as if set forth fully in this paragraph.

28. The Agreement is a valid, enforceable contract. Freescale performed its obligations under the Agreement. However, Condit breached its obligations under the Agreement at least as follows:

- a. failing to properly install the pre- and after-filter elements;
- b. failing to provide a technician on site to offer guidance as a factory representative to see that the installation was satisfactory per the factory's drawings and guidelines;
- c. failing to confirm proper operation upon start-up of Dryer 3;
- d. failing to deliver a dryer that would cool with process air for 12-hours with 29 scfm of process air.

29. Condit further breached its indemnity obligation under the Agreement for faulty work or products that caused damage to Freescale. In particular, Condit agreed:

TO THE FULLEST EXTENT PERMITTED BY LAW, [CONDIT] WILL DEFEND, INDEMNIFY AND HOLD HARMLESS FREESCALE . . . FROM AGAINST ANY AND ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING BUT NOT LIMITED TO ATTORNEYS' FEES AND PROFESSIONAL FEES, ARISING OUT OF, RESULTING FROM OR RELATING TO PERFORMANCE OF THE WORK OR ANY PRODUCTS OR MATERIALS SUPPLIED BY THE PROVIDER HEREUNDER, **EXCEPT TO THE EXTENT SUCH CLAIM, DAMAGE, LOSS OR EXPENSE IS CAUSED BY THE CONCURRENT OR SOLE NEGLIGENCE OF [FREESCALE]**. This indemnity covers, without limitation, both direct claims against [Condit] by [Freescale] as well as third party claims against [Freescale].

30. Despite its indemnity agreement, Condit has failed and refused to pay Freescale for all damages arising out of, resulting from or relating to the performance of its work or the products or materials it supplied under the Agreement. Condit's multiple breaches of the Agreement have caused Freescale to suffer damage.

## VII.

### **CAUSE OF ACTION THREE: CONDIT'S BREACH OF WARRANTY**

31. Freescale re-alleges and incorporates the allegations set forth above in paragraphs 1 to 29 as if set forth fully in this paragraph.

32. In the Agreement, Condit made an express warranty that "all Services w[ould] be performed in a careful, efficient, and workmanlike manner, and w[ould] conform to the requirements and specifications and to the highest standards applicable in the field of [Condit's] work." Condit further warranted that its "Deliverables" would "be free from defects in material and workmanship" and would "comply with all requirements of pertinent specifications, drawings, and samples." These representations about the quality or character of the products and services became a part of the basis of the parties' bargain.

33. Condit's deliverables and services did not conform to the character and quality of the deliverables and services promised, and Condit breached its express warranty in at least the following ways:

- a. failing to ensure proper installation of the pre- and after-filter elements;
- b. failing to perform and oversee the retrofit project with appropriate quality control measures;
- c. failing to adequately train and supervise workers during the retrofit project;
- d. failing to properly start up and/or commission Dryer 3, including making sure the correct filter elements were installed; and
- e. failing to deliver a dryer that was not defective and would cool with process air for 12-hours with 29 scfm of process air.

34. Condit also breached certain warranties implied by law, including without limitation the implied warranty of good and workmanlike performance of services.

35. Condit's breach of express and implied warranties proximately caused damage to Freescale.

**VIII.**  
**CAUSE OF ACTION FOUR: SPX'S**  
**PRODUCT LIABILITY (DESIGN DEFECT)**

36. Freescale re-alleges and incorporates the allegations set forth above in paragraphs 1 to 34 as if set forth fully in this paragraph.

37. SPX designed and manufactured the dryer and dryer components at issue in this lawsuit, including the components of the dryer system that were re-used in the retrofit project. In particular, it designed the program logic for the Smart Controller, including the allowed settings and ranges for end users.

38. The duty to design a reasonably safe product is an obligation imposed by law. This duty extends to both intended and reasonably foreseeable uses of the product. It also includes providing safety features that protect users against the foreseeable risk of harm presented by the particular design.

39. Here, the fire and resulting damage in reasonable probability would not have

occurred had SPX designed a reasonably safe product. Instead, it designed a product that was unreasonably dangerous to persons or property. In particular, SPX had several safer alternatives to the controller design it implemented. These safer alternatives in reasonable probability would have prevented or significantly reduced the risk of injury, without substantially impairing the product's utility. And the safer alternatives in reasonable probability were all technologically and economically feasible when the product left SPX's or Condit's control by the application of existing or reasonably achievable scientific knowledge.

40. These safer design alternatives included, without limitation:

- a. Programming the controller to allow the end user to set a minimum cooldown period;
- b. Programming a minimum cooldown period greater than 10 seconds;
- c. Programming the controller not to override the allotted cooldown time merely because a high humidity warning existed or, alternatively, allowing the end user to decide whether the cooldown time would be skipped in this circumstance.
- d. Including a temperature sensor and related control logic at the discharge of the dryer that would have prevented a switchover of desiccant chambers until a pre-set, safe temperature was reached.
- e. Designing the pre-filter and after-filter housings and cartridges such that the cartridges would not be interchangeable and/or easily misidentified.
- f. Designing both pre-filter and after-filter cartridges capable of withstanding the maximum temperatures capable of being generated by the dryer.

41. SPX's failure to implement one or more of these safer design alternatives proximately caused damage to Freescale.

## IX.

### CAUSE OF ACTION FIVE: SPX'S PRODUCT LIABILITY (MARKETING DEFECT)

42. Freescale re-alleges and incorporates the allegations set forth above in paragraphs 1 to 40 as if set forth fully in this paragraph.

43. Because of the nature of its products, SPX knew or should have known of the potential harm it could cause a user like Freescale under various operations. Despite the fact they knew or should have known of the potential risks involving the product, SPX marketed it without adequate warning of the dangers or providing instructions for safe use. SPX failed to inform Freescale of the hazards associated with the use of the product.

44. SPX failed to provide or provided inadequate warnings regarding the following:

- a. the dangers of hot switchovers, including the temperature of the air that would be released into the dry air system in the event of a hot switchover;
- b. that hot switchovers of desiccant chambers would occur even if the dryer were programmed to include a cooldown period;
- c. the circumstances under which a hot switchover would occur;
- d. the fact that the selected cooldown period would be skipped under certain circumstances, and the details of those circumstances;
- e. that if set up with a cooldown period, that period may be skipped under certain operating conditions;
- f. that it was impossible to program a minimum cooldown period, which was factory set to ten seconds;
- g. the downstream design that was required for a hot switchover not to result in property damage or personal injury;
- h. that pre-filter and after-filter cartridges were similarly designed and would fit in each other's housings.
- i. that to avoid the possibility of catastrophic damage, only filters capable of withstanding the maximum temperatures generated by the dryer should be used.

45. SPX's failure to provide adequate warnings proximately caused damage to Freescale.

**X.**  
**CAUSE OF ACTION SIX: SPX'S NEGLIGENCE**

46. Freescale re-alleges and incorporates the allegations set forth above in paragraphs 1 to 44 as if set forth fully in this paragraph.

47. To the extent SPX's design was not unreasonably dangerous, SPX nevertheless failed to design the product with ordinary care and prudence. SPX owed Freescale a legal duty to design its products in accordance with the professional standards of care and quality generally accepted in SPX's industry. SPX further had the obligation to perform all of its tasks in accordance with the standard of care required of an ordinarily prudent person. SPX breached both of these legal duties to Freescale in at least the following ways:

- a. Programming the controller to prevent the end user from setting a minimum cooldown period;
- b. Programming a minimum cooldown period of only 10 seconds;
- c. Programming the controller to override the allotted cooldown time merely because a high humidity warning existed or, alternatively, preventing the end user from determining whether the cooldown time would be skipped in this circumstance based on their particular installation and application;
- d. Failing to include a temperature sensor and related control logic at the discharge of the dryer that would have prevented a chamber switch until a pre-set temperature was reached; and
- e. Designing the pre-filter and after-filter as well as their housings such that the filters were interchangeable and/or easily misidentified.
- f. Supplying pre-filter and after-filter cartridges not capable of withstanding the maximum temperatures generated by the dryer.

48. SPX's acts and omissions proximately caused damage to Freescale.

**XI.**  
**CAUSE OF ACTION SEVEN: CONDIT'S PRODUCT LIABILITY**

49. Freescale re-alleges and incorporates the allegations set forth above in paragraphs 1 to 47 as if set forth fully in this paragraph.

50. Condit did not manufacture the dryer or dryer components at issue. However, it is liable for the harm caused to Freescale by SPX's products for one or more of the following reasons:

a. Condit participated in the selection of the component dryer parts that would be used in the retrofit;

b. Condit installed a product, or had a product installed, on another product and Freescale's harm resulted from the product's installation onto that assembled product.

c. Condit made an express factual representation about an aspect of the product that was incorrect (namely that it would cool with process air for 12-hours with 29 scfm of process air), which Freescale relied on in obtaining or using the product and which if had been true, Freescale would not have suffered the same degree of harm.

d. To the extent the Court denies joinder of SPX, Condit is liable in product liability because SPX is not subject to the jurisdiction of the Court.

51. For these reasons, Condit is liable for harm caused to Freescale by SPX's products and seeks damages.

## **XII.** **DAMAGES**

52. Freescale re-alleges and incorporates the allegations set forth above in paragraphs 1 to 50 as if set forth fully in this paragraph.

53. As a proximate and producing cause of all claims asserted herein against Condit and SPX, Freescale has sustained losses and damages including, but not limited to, the value of the silicon wafers lost as a result of the fire; all labor costs associated with the incident and recovery therefrom; the cost of repair parts and services; all startup and testing costs; expenses incurred but not recouped because of lost production; and lost profits. Freescale further seeks all damages recoverable by law for the causes of action asserted, including without limitation its direct, indirect, consequential, special, and incidental losses.

## **XII.** **ATTORNEYS' FEES**

54. Pursuant to Section 38.001 *et seq.* of the Texas Civil Practice and Remedies Code and Condit's contractual indemnity, Freescale seeks recovery of its reasonable and necessary

attorneys' fees and costs incurred in prosecuting its claims against Condit in this action.

**XIII.**  
**CONDITIONS PRECEDENT**

55. All conditions precedent have been performed, excused, waived, or otherwise satisfied.

**XIV.**  
**JURY DEMAND**

56. Freescale requests a jury trial of all issues in this action so triable and tenders the required fee with this petition.

**PRAYER FOR RELIEF**

WHEREFORE, Freescale respectfully requests that Condit and SPX be summoned to appear and answer herein, and that upon final trial, Freescale be awarded a judgment for all of its damages; attorneys' fees and costs under Texas Civil Practice and Remedies Code § 38.001 *et seq.*; prejudgment and postjudgment interest as allowed by law; costs of suit; and all other relief, legal or equitable, to which Freescale may show itself justly entitled.

Dated: December 1, 2016

Respectfully submitted,

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